RAW SEQUENCE LISTING   DATE: 08/27/2001
PATENT APPLICATION: US/09/828,313   TIME: 12:31:16

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Output Set: N:\CRF3\08272001\I828313.raw

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p.5

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 3 <110> APPLICANT: COSTA e SILVA, OSWALDO DA
 4         BOHNERT, HANS J.
 5         THIELEN, NOCHA VAN
 6         CHEN, ROUYING
 7         SARRIA-MILLAN, RODRIGO
 9 <120> TITLE OF INVENTION: PROTEIN KINASE STRESS-RELATED PROTEINS AND METHODS OF
10         USE IN PLANTS
12 <130> FILE REFERENCE: 16313-0032
14 <140> CURRENT APPLICATION NUMBER: 09/828,313
15 <141> CURRENT FILING DATE: 2001-04-06
17 <150> PRIOR APPLICATION NUMBER: 60/196,001
18 <151> PRIOR FILING DATE: 2000-04-07
20 <160> NUMBER OF SEQ ID NOS: 128
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42 catgtctgga acctataccg tgaagagtga cgtctacagc ttcggtgttg taatgctgga 180
43 gctactcact gggcgcaagc ctttagacag ctcaagacca cgatccgagc aatctttggt 240
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45 gttgaagggc atctaccctg ctaaatcact ctctcggttt gctgatatag tcgccctttg 360
46 cgtccagccg gagcccgagt tccgaccccc gatgtctgaa gtggtgcagg cacttgtaag 420
47 gctgatgcag cgtgcgagtc tgagcaaacg cagatcggag tccgctgttg ggaattgagt 480
48 cgaacgagcc atctgagact tcacctttga gagtactgaa gcgcccacta gcctaatcgt 540
49 gcatctttgg ccatctcgtt tctgagtgga acacaaagct gggtatattc tttggtggtt 600
W--> 50 aagcaaccat ttgtcccaat ttgaacttcc gctgggaag gtctgtatgt tgagaaacga 660
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57 <213> ORGANISM: Physcomitrella patens
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61 gacaatctgg cctggtgtta gccagcaccg tgattggcac gagtttcctc aatggagacc 120
62 acaagatctg tcccttgctg ttcccggact cagcgcggtt ggcttagacc ttctcgccaa 180
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  65 taacctctac ctgtccaaga cgaaggacat ctaactcttc agtcaaactt ggccaatcat 360
  66 gctgattggg aattgaacca caggaacgag gtgggcaccg tggttcgctg tagcatacaa 420
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  89 gacttccagc acgaggtgca attgctcgta aaggttcggc acccaaacat tgtgcagttc 480
  90 ctcggggctg ttacccgtca aagacctctc atgttagtca ccgagtttct ggcaggggggg 540
  91 cgatttgcat cagttgctga ggagcaccct aaatttggct cctgaccgca tcgtgaagta 600
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 108 atccaaatgg aagctcagtt tgcaacatga agtacattga acacacctac cgcccaccag 180
 109 tcagaagcca ggccatgacc ttgtccttga atgatctcgg gtgctaagaa atcagccatg 240
 110 ccacagactg tgaaagtgcg ctcatccgac atttgctttg caaaccgaaa atcaaccagc 300
 111 tgaagtcgtc ctttccgatc tatcataaga acatcgggag agatgccacg atatacaacg 360
 112 ccatccttgt gcagaagttc gacggctaat accacgttgg cgaccagaaa acgagctgag 420
 113 ttctcgtcta aaggtgaccg aagtagaagt tctagaggcc cagctaacac acaattaaga 480
 114 acgagtgcca cattgtcact gtcaataggg gtggccaaga gatgcggcac gaatggggaa 540
 115 ggcctcagtt gcttgaaaag agttctctcc aataggactt ggccctcccg accgagtctc 600
 116 tgaactttac gtctctggta ccttttcatg cttatgacgt catctgattt cttgcagagc 660
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133 ataaagtcat ttctagtctg atccatacaa gctaccgaca caatgctaga agccttgatt 180
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137 ccctaattcg ccgcaacaac ctcacgacgg aactccgact tggtcaaggg tggacaatat 420
138 gatacattcg aaggtcgatt ttgcaaatgg gacgaagcag cggaattctg gctgcgcact 480
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140 agctggaatt ttttctgaat gaaaagatca cggaacaagc ttcggaggta cagtagtcag 600
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143 gtgttgcttc tggtcagtga gggcgttgcc cgcccttccc ttgccatggc aaattgcctc 780
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163 acttcatcct cgtacgttac ttggcaagga ttatggttta gtgataaaaa gcttcacaag 180
164 ccggcaagca tgctggttgc ttctgctgca atctaatgat tatttcctta ggaatcgtat 240
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170 agttggcaga tggcggttgt ggatggcggc tagatatccg ctttgggtcc gaagtaactg 600
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172 ctgttcgaga ggaatctacg acttctgctg atgcccctga gggcctgctg ctagatagga 720
173 cagctcgcct ggaggaagaa cccccccgag ttgcatacga agatgtatgc atgcgctctg 780
174 gttctgacac aacagcaaga gcagaatcct tagcagattc atcaagtcca ggacttttgt 840
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179 ctgtaaaact atttccagtt taggcaaaca gaagtggcac tgtaataaac tgaaaatcat 1140
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182 accctcacga ataaagaggt cacggaagat tcttttcaaa tatgcatagt cgggtttgtc 1320
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216 atactacatt catgagctgc tcaaggcttt ggactattgc cattctcaag ggattatgca 360
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220 catgtggagc tctgggtgc atgtttgccg gcatgatatt tcggaaggag ccattctttt 600
W--> 221 atgggcatga cattcatga tcaacttggt gaagatcgct aaggtgttgg gaacttgatg 660
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240 tgcacatagt ctctcccagg gaacaacgca gatcggttaa gcaactccat gaagatgcac 600
241 cccacagacc aaatgtcaat agctgcagtg tatgctgaac aattcaggag cagctctgga 660
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243 gccaagccaa aatctgcgat tttcaaatcg caattggcat tgacgagaag gttggtgggc 780
244 ttcaagtccc ggtgcaagac gttcgccgaa tggatgtact tcaagccccg caagatttga 840
245 tacagaaaat actgacagtg gtcttctgtg agagcttgat ttgaacgaat gatctggtgt 900
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272 acaagtgagt gtcccgcaaa ggagcagtcc tccgccgaag aacgtctcac cacctcccca 480
273 gcccggcatt ttgtagcgcg gactgcgatc gaagtattct gctgcatctc agcaagttca 540
274 acgaaatcga gggcaacgcg aaatctcttt tatatggcgt agtttgtgtc tccgactgga 600
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L:106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:276 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9
L:310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
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